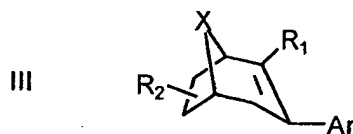
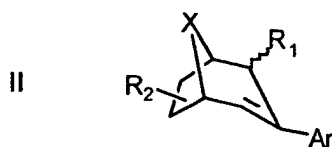
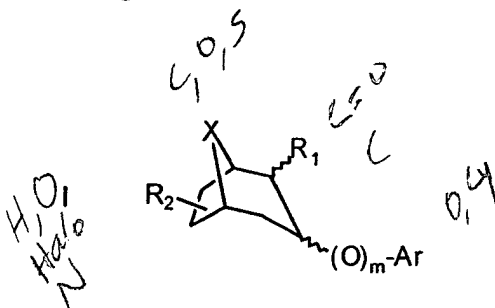


We claim:

1. A compound having the structural formula:



wherein:

R₁ = COOCH₃, COR₃, lower alkyl, lower alkenyl, lower alkynyl, CONHR₄, or

COR₆;

R₂ = is a 6 α , 6 β , 7 α or 7 β substituent, which can be selected from H, OH, OR₃, F, Cl, Br, and NHR₃;

X = CH₂, CHY, CYY₁, CO, O, S; SO, SO₂, or C=CX₁Y with the C, O or S atom being a member of the ring;

X₁ = NR₃, CH₂, CHY, CYY₁, CO, O, S; SO, SO₂, or NSO₂R₃;

R₃ = H, (CH₂)_nC₆H₄Y, C₆H₄Y, CHCH₂, lower alkyl, lower alkenyl or lower alkynyl;

Y and Y₁ = H, Br, Cl, I, F, OH, OCH₃, CF₃, NO₂, NH₂, CN, NHCOCH₃, N(CH₃)₂, (CH₂)_nCH₃, COCH₃, or C(CH₃)₃;

R₄ = CH₃, CH₂CH₃, or CH₃SO₂;

R₆ = morpholinyl or piperidinyl;

Ar = phenyl-R₅, naphthyl-R₅, anthracenyl-R₅, phenanthrenyl-R₅, or diphenylmethoxy-R₅;

R₅ = Br, Cl, I, F, OH, OCH₃, CF₃, NO₂, NH₂, CN, NHCOCH₃, N(CH₃)₂, (CH₂)_nCH₃, COCH₃, C(CH₃)₃ where n= 0-6, 4-F, 4-Cl, 4-I, 2-F, 2-Cl, 2-I, 3-F, 3-Cl, 3-I, 3,4-diCl, 3,4-diOH, 3,4-diOAc, 3,4-diOCH₃, 3-OH-4-Cl, 3-OH-4-F, 3-Cl-4-OH, 3-F-4-OH, lower alkyl, lower alkoxy, lower alkenyl, lower alkynyl, CO(lower alkyl), or CO(lower alkoxy);

m = 0 or 1; and

n = 0, 1, 2, 3, 4 or 5;

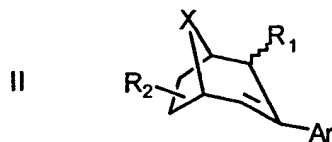
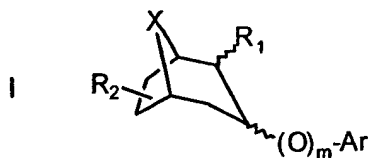
wherein the compound has a SERT/DAT selectivity ratio of at least 3.

2. The compound according to claim 1, wherein the SERT/DAT selectivity ratio is at least about 8.

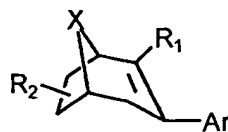
3. The compound according to claim 1, wherein the SERT/DAT selectivity ratio is at least about 50.

102 4. The compound according to claim 1, wherein the C in the 3 position is in the α conformation.

5. A compound having the structural formula:



III



wherein:

R_1 = COOCH_3 , COR_3 , lower alkyl, lower alkenyl, lower alkynyl, CONHR_4 , or COR_6 ;

R_2 = is a 6α , 6β , 7α or 7β substituent, which can be selected from H, OH, OR_3 , F, Cl, Br, and NHR_3 ;

X = CH_2 , CHY , CYY_1 , CO, O, S; SO, SO_2 , or $\text{C}=\text{CX}_1\text{Y}$ with the C, O or S atom being a member of the ring;

X_1 = NR_3 , CH_2 , CHY , CYY_1 , CO, O, S; SO, SO_2 , or NSO_2R_3 ;

R_3 = H, $(\text{CH}_2)_n\text{C}_6\text{H}_4\text{Y}$, $\text{C}_6\text{H}_4\text{Y}$, CHCH_2 , lower alkyl, lower alkenyl or lower alkynyl;

Y and Y_1 = H, Br, Cl, I, F, OH, OCH_3 , CF_3 , NO_2 , NH_2 , CN, NHCOCH_3 , $\text{N}(\text{CH}_3)_2$, $(\text{CH}_2)_n\text{CH}_3$, COCH_3 , or $\text{C}(\text{CH}_3)_3$;

R_4 = CH_3 , CH_2CH_3 , or CH_3SO_2 ;

R_6 = morpholinyl or piperidinyl;

Ar = phenyl- R_5 , naphthyl- R_5 , anthracenyl- R_5 , phenanthrenyl- R_5 , or diphenylmethoxy- R_5 ;

R_5 = Br, Cl, I, F, OH, OCH_3 , CF_3 , NO_2 , NH_2 , CN, NHCOCH_3 , $\text{N}(\text{CH}_3)_2$, $(\text{CH}_2)_n\text{CH}_3$, COCH_3 , $\text{C}(\text{CH}_3)_3$ where $n = 0-6$, 4-F, 4-Cl, 4-I, 2-F, 2-Cl, 2-I, 3-F, 3-Cl, 3-I, 3,4-diCl, 3,4-diOH, 3,4-diOAc, 3,4-diOCH₃, 3-OH-4-Cl, 3-OH-4-F, 3-Cl-4-OH, 3-F-4-OH, lower alkyl, lower alkoxy, lower alkenyl, lower alkynyl, CO(lower alkyl), or CO(lower alkoxy);

$m = 0$ or 1 ; and

$n = 0, 1, 2, 3, 4$ or 5 ;

wherein the compound has an affinity (K_i) for the SERT of less than about 500 nM.

6. The compound according to claim 5, wherein the compound has an IC_{50} at the SERT of less than about 50 nM.

7. The compound according to claim 5, wherein the compound has an IC_{50} at the SERT of less than about 25 nM.

8. The compound according to claim 5, wherein the compound has an IC_{50} at the SERT of less than about 15 nM.

9. The compound according to claim 5, wherein the C in the 3 position is in the α conformation.

10. The compound of claim 1, selected from the group consisting of:

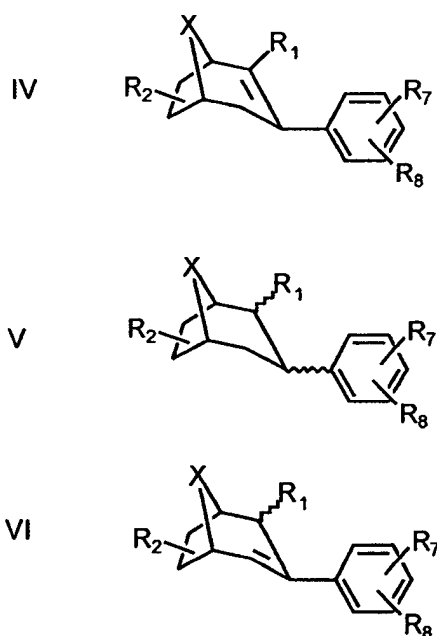
- a. 2 β -carbomethoxy-3 β -(4'-propynylphenyl)-8-oxabicyclo(3.2.1)octane;
- b. (*1R, 1S*)-2 β -carbomethoxy-3 α -(4'-propynylphenyl)-8-oxabicyclo(3.2.1)octane;
- c. 2 β -carbomethoxy-3 α -(4-isopropenylphenyl)-8-oxabicyclo(3.2.1)octane;
- d. 2 β -carbomethoxy-3 β -(4-isopropenylphenyl)-8-oxabicyclo(3.2.1)octane;
- e. 2 β -carbomethoxy-3 β -(4-isopropenylphenyl)-8-oxabicyclo(3.2.1)octane.

11. The compound of claim 5, selected from the group consisting of:

- a. 2- β -carbomethoxy-3- β -(3,4-dichlorophenyl)-8-oxabicyclo(3.2.1)octane;
- b. 2- β -carbomethoxy-3- β -(3,4-dichlorophenyl)bicyclo(3.2.1)octane;
- c. 2 β -carbomethoxy-3 β -(4'-propynylphenyl)-8-oxabicyclo(3.2.1)octane;
- d. 2 β -carbomethoxy-3 α -(4'-propynylphenyl)-8-oxabicyclo(3.2.1)octane;
- e. 2 β -carbomethoxy-3 β -(2-naphthyl)-8-bicyclo(3.2.1)octane;

- f. 2 β -carbomethoxy-3 α -(2-naphthyl)-8-bicyclo(3.2.1)octane;
- g. 2 β -carbomethoxy-3 α -(4-isopropenylphenyl)-8-oxabicyclo(3.2.1)octane;
- h. 2 β -carbomethoxy-3 β -(4-isopropenylphenyl)-8-oxabicyclo(3.2.1)octane;
- i. 2 β -carbomethoxy-3 β -(4-isopropenylphenyl)-8-oxabicyclo(3.2.1)octane.

12. The compound according to claim 1, wherein the compound has the structure:



wherein:

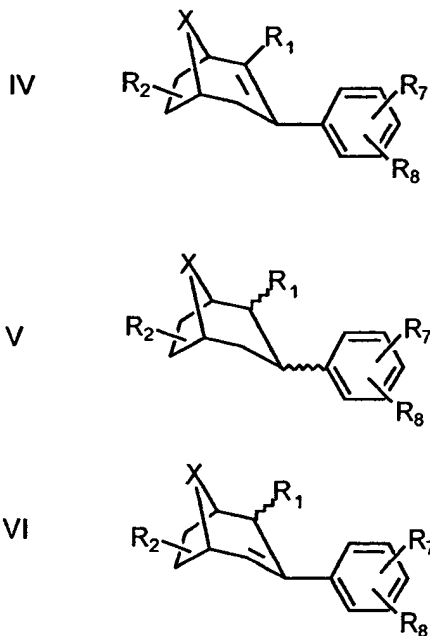
X = O, CH₂, CHY, CYY₁, CO, or C=CX₁Y;

R₇ = lower alkenyl or lower alkynyl group having from about 2 to about 8 carbon atoms: and,

R₈ = H or Br, Cl, I, F, OH, OCH₃, CF₃, NO₂, NH₂, CN, NHCOCH₃, N(CH₃)₂, (CH₂)_nCH₃, COCH₃, C(CH₃)₃ where n= 0-6.

13. The compound according to claim 12, wherein R₇ is selected from ethenyl, propenyl, butenyl, propynyl, butynyl and methylpropynyl.

14. The compound according to claim 5, wherein the compound has the structure:



wherein:

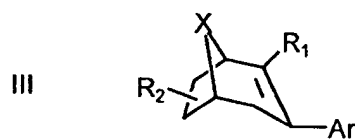
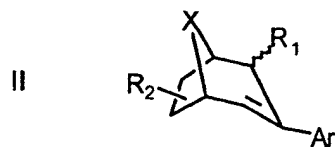
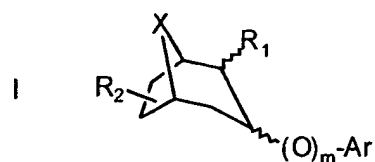
$X = O, CH_2, CHY, CYY_1, CO, \text{ or } C=CX_1Y;$

$R_7 =$ lower alkenyl or lower alkynyl group having from about 2 to about 8 carbon atoms: and,

$R_8 = H \text{ or } Br, Cl, I, F, OH, OCH_3, CF_3, NO_2, NH_2, CN, NHCOCH_3, N(CH_3)_2, (CH_2)_nCH_3, COCH_3, C(CH_3)_3$ where $n = 0-6$.

15. The compound according to claim 14, wherein R_7 is selected from ethenyl, propenyl, butenyl, propynyl, butynyl and methylpropynyl.

16. A pharmaceutical composition comprising a therapeutically effective amount of a pharmaceutically acceptable carrier and an effective amount of a compound having the structural formula:



wherein:

R_1 = COOCH_3 , COR_3 , lower alkyl, lower alkenyl, lower alkynyl, CONHR_4 , or COR_6 ;

R_2 = is a 6α , 6β , 7α or 7β substituent, which can be selected from H, OH, OR_3 , F, Cl, Br, and NHR_3 ;

X = CH_2 , CHY, CYY_1 , CO, O, S; SO, SO_2 , or $\text{C}=\text{CX}_1\text{Y}$ with the C, O or S atom being a member of the ring;

X_1 = NR_3 , CH_2 , CHY, CYY_1 , CO, O, S; SO, SO_2 , or NSO_2R_3 ;

R_3 = H, $(\text{CH}_2)_n\text{C}_6\text{H}_4\text{Y}$, $\text{C}_6\text{H}_4\text{Y}$, CHCH_2 , lower alkyl, lower alkenyl or lower alkynyl;

Y and Y_1 = H, Br, Cl, I, F, OH, OCH_3 , CF_3 , NO_2 , NH_2 , CN, NHCOCH_3 , $\text{N}(\text{CH}_3)_2$, $(\text{CH}_2)_n\text{CH}_3$, COCH_3 , or $\text{C}(\text{CH}_3)_3$;

R_4 = CH_3 , CH_2CH_3 , or CH_3SO_2 ;

R_6 = morpholinyl or piperidinyl;

Ar = phenyl- R_5 , naphthyl- R_5 , anthracenyl- R_5 , phenanthrenyl- R_5 , or diphenylmethoxy- R_5 ;

R_5 = Br, Cl, I, F, OH, OCH_3 , CF_3 , NO_2 , NH_2 , CN, NHCOCH_3 , $\text{N}(\text{CH}_3)_2$, $(\text{CH}_2)_n\text{CH}_3$, COCH_3 , $\text{C}(\text{CH}_3)_3$ where $n=0-6$, 4-F, 4-Cl, 4-I, 2-F, 2-Cl, 2-I, 3-F, 3-Cl,

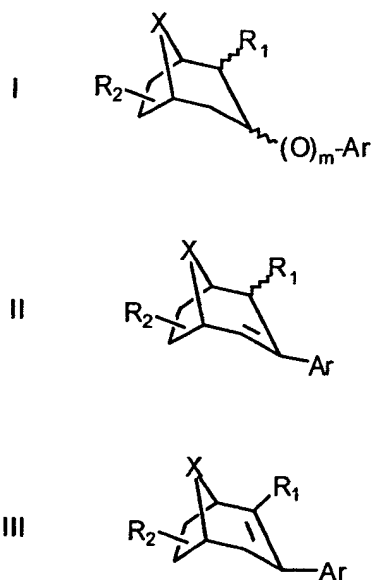
3-I, 3,4-diCl, 3,4-diOH, 3,4-diOAc, 3,4-diOCH₃, 3-OH-4-Cl, 3-OH-4-F, 3-Cl-4-OH, 3-F-4-OH, lower alkyl, lower alkoxy, lower alkenyl, lower alkynyl, CO(lower alkyl), or CO(lower alkoxy);

$m = 0$ or 1 ; and

$n = 0, 1, 2, 3, 4$ or 5 ;

wherein the compound has a SERT/DAT selectivity ratio of at least 3.

17. A pharmaceutical composition comprising a therapeutically effective amount of a pharmaceutically acceptable carrier and an effective amount of a compound having the structural formula:



wherein:

$R_1 = COOCH_3$, COR_3 , lower alkyl, lower alkenyl, lower alkynyl, $CONHR_4$, or COR_6 ;

$R_2 =$ is a 6α , 6β , 7α or 7β substituent, which can be selected from H, OH, OR_3 , F, Cl, Br, and NHR_3 ;

$X = CH_2$, CHY , CYY_1 , CO, O, S; SO, SO_2 , or $C=CX_1Y$ with the C, O or S atom being a member of the ring;

$X_1 = \text{NR}_3, \text{CH}_2, \text{CHY}, \text{CYY}_1, \text{CO}, \text{O}, \text{S}; \text{SO}, \text{SO}_2, \text{or } \text{NSO}_2\text{R}_3;$

$\text{R}_3 = \text{H}, (\text{CH}_2)_n\text{C}_6\text{H}_4\text{Y}, \text{C}_6\text{H}_4\text{Y}, \text{CHCH}_2, \text{lower alkyl}, \text{lower alkenyl or lower alkynyl};$

$\text{Y and Y}_1 = \text{H}, \text{Br}, \text{Cl}, \text{I}, \text{F}, \text{OH}, \text{OCH}_3, \text{CF}_3, \text{NO}_2, \text{NH}_2, \text{CN}, \text{NHCOCH}_3, \text{N}(\text{CH}_3)_2, (\text{CH}_2)_n\text{CH}_3, \text{COCH}_3, \text{or } \text{C}(\text{CH}_3)_3;$

$\text{R}_4 = \text{CH}_3, \text{CH}_2\text{CH}_3, \text{or } \text{CH}_3\text{SO}_2;$

$\text{R}_6 = \text{morpholinyl or piperidinyl};$

$\text{Ar} = \text{phenyl-R}_5, \text{naphthyl-R}_5, \text{anthracenyl-R}_5, \text{phenanthrenyl-R}_5, \text{or diphenylmethoxy-R}_5;$

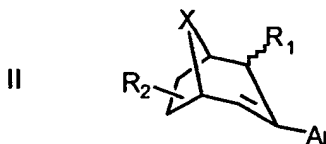
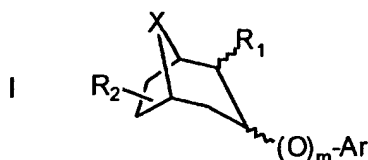
$\text{R}_5 = \text{Br}, \text{Cl}, \text{I}, \text{F}, \text{OH}, \text{OCH}_3, \text{CF}_3, \text{NO}_2, \text{NH}_2, \text{CN}, \text{NHCOCH}_3, \text{N}(\text{CH}_3)_2, (\text{CH}_2)_n\text{CH}_3, \text{COCH}_3, \text{C}(\text{CH}_3)_3 \text{ where } n = 0-6, 4\text{-F}, 4\text{-Cl}, 4\text{-I}, 2\text{-F}, 2\text{-Cl}, 2\text{-I}, 3\text{-F}, 3\text{-Cl}, 3\text{-I}, 3,4\text{-diCl}, 3,4\text{-diOH}, 3,4\text{-diOAc}, 3,4\text{-diOCH}_3, 3\text{-OH-4-Cl}, 3\text{-OH-4-F}, 3\text{-Cl-4-OH}, 3\text{-F-4-OH}, \text{lower alkyl}, \text{lower alkoxy}, \text{lower alkenyl}, \text{lower alkynyl}, \text{CO(lower alkyl)}, \text{or CO(lower alkoxy)};$

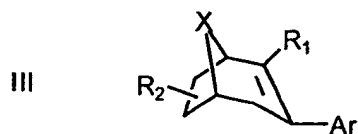
$m = 0 \text{ or } 1;$ and

$n = 0, 1, 2, 3, 4 \text{ or } 5;$

wherein the compound has an affinity (K_i) for the SERT of less than about 500 nM.

18. A method for inhibiting serotonin reuptake of a monoamine transporter in a mammal comprising administering to the mammal a serotonin reuptake inhibiting amount of a compound having the structural formula:





wherein:

$R_1 = \text{COOCH}_3, \text{COR}_3, \text{lower alkyl, lower alkenyl, lower alkynyl, CONHR}_4, \text{ or } \text{COR}_6;$

$R_2 = \text{is a } 6\alpha, 6\beta, 7\alpha \text{ or } 7\beta \text{ substituent, which can be selected from H, OH, OR}_3, \text{ F, Cl, Br, and NHR}_3;$

$X = \text{CH}_2, \text{CHY, CYY}_1, \text{CO, O, S; SO, SO}_2, \text{ or } \text{C}=\text{CX}_1\text{Y with the C, O or S atom being a member of the ring;}$

$X_1 = \text{NR}_3, \text{CH}_2, \text{CHY, CYY}_1, \text{CO, O, S; SO, SO}_2, \text{ or } \text{NSO}_2\text{R}_3;$

$R_3 = \text{H, (CH}_2)_n\text{C}_6\text{H}_4\text{Y, C}_6\text{H}_4\text{Y, CHCH}_2, \text{lower alkyl, lower alkenyl or lower alkynyl;}$

$\text{Y and Y}_1 = \text{H, Br, Cl, I, F, OH, OCH}_3, \text{CF}_3, \text{NO}_2, \text{NH}_2, \text{CN, NHCOCH}_3, \text{N(CH}_3)_2, \text{(CH}_2)_n\text{CH}_3, \text{COCH}_3, \text{ or } \text{C(CH}_3)_3;$

$R_4 = \text{CH}_3, \text{CH}_2\text{CH}_3, \text{ or } \text{CH}_3\text{SO}_2;$

$R_6 = \text{morpholinyl or piperidinyl;}$

$\text{Ar} = \text{phenyl-R}_5, \text{naphthyl-R}_5, \text{anthracenyl-R}_5, \text{phenanthrenyl-R}_5, \text{ or diphenylmethoxy-R}_5;$

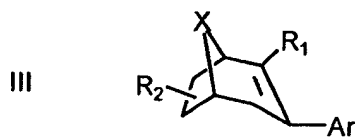
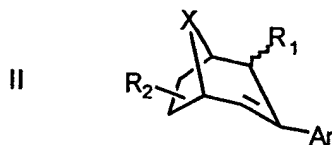
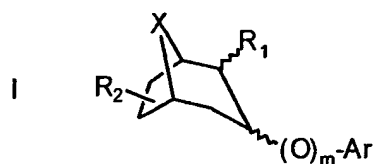
$R_5 = \text{Br, Cl, I, F, OH, OCH}_3, \text{CF}_3, \text{NO}_2, \text{NH}_2, \text{CN, NHCOCH}_3, \text{N(CH}_3)_2, \text{(CH}_2)_n\text{CH}_3, \text{COCH}_3, \text{C(CH}_3)_3 \text{ where } n=0-6, 4\text{-F, } 4\text{-Cl, } 4\text{-I, } 2\text{-F, } 2\text{-Cl, } 2\text{-I, } 3\text{-F, } 3\text{-Cl, } 3\text{-I, } 3,4\text{-diCl, } 3,4\text{-diOH, } 3,4\text{-diOAc, } 3,4\text{-diOCH}_3, 3\text{-OH-4-Cl, } 3\text{-OH-4-F, } 3\text{-Cl-4-OH, } 3\text{-F-4-OH, lower alkyl, lower alkoxy, lower alkenyl, lower alkynyl, CO(lower alkyl), or CO(lower alkoxy);}$

$m = 0 \text{ or } 1; \text{ and}$

$n = 0, 1, 2, 3, 4 \text{ or } 5;$

wherein the compound has a SERT/DAT selectivity ratio of at least 3.

19. A method for inhibiting serotonin reuptake of a monoamine transporter in a mammal comprising administering to the mammal a serotonin reuptake inhibiting amount of a compound having the structural formula:



wherein:

$R_1 = \text{COOCH}_3, \text{COR}_3, \text{lower alkyl, lower alkenyl, lower alkynyl, CONHR}_4, \text{ or } \text{COR}_6;$

R_2 is a $6\alpha, 6\beta, 7\alpha$ or 7β substituent, which can be selected from H, OH, OR_3 , F, Cl, Br, and NHR_3 ;

$X = \text{CH}_2, \text{CHY, CYY}_1, \text{CO, O, S; SO, SO}_2, \text{ or } \text{C}=\text{CX}_1\text{Y}$ with the C, O or S atom being a member of the ring;

$X_1 = \text{NR}_3, \text{CH}_2, \text{CHY, CYY}_1, \text{CO, O, S; SO, SO}_2, \text{ or } \text{NSO}_2\text{R}_3;$

$R_3 = \text{H, (CH}_2)_n\text{C}_6\text{H}_4\text{Y, C}_6\text{H}_4\text{Y, CHCH}_2, \text{ lower alkyl, lower alkenyl or lower alkynyl;}$

Y and $Y_1 = \text{H, Br, Cl, I, F, OH, OCH}_3, \text{CF}_3, \text{NO}_2, \text{NH}_2, \text{CN, NHCOCH}_3, \text{N(CH}_3)_2, \text{(CH}_2)_n\text{CH}_3, \text{COCH}_3, \text{ or } \text{C(CH}_3)_3;$

$R_4 = \text{CH}_3, \text{CH}_2\text{CH}_3, \text{ or } \text{CH}_3\text{SO}_2;$

$R_6 = \text{morpholinyl or piperidinyl;}$

Ar = phenyl- R_5 , naphthyl- R_5 , anthracenyl- R_5 , phenanthrenyl- R_5 , or diphenylmethoxy- R_5 ;

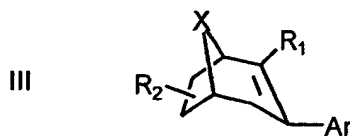
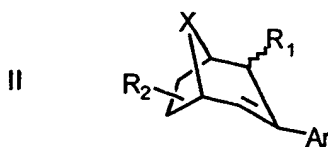
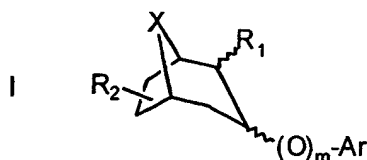
$R_5 = \text{Br, Cl, I, F, OH, OCH}_3, \text{CF}_3, \text{NO}_2, \text{NH}_2, \text{CN, NHCOCH}_3, \text{N(CH}_3)_2, (\text{CH}_2)_n\text{CH}_3, \text{COCH}_3, \text{C(CH}_3)_3$ where $n = 0-6$, 4-F, 4-Cl, 4-I, 2-F, 2-Cl, 2-I, 3-F, 3-Cl, 3-I, 3,4-diCl, 3,4-diOH, 3,4-diOAc, 3,4-diOCH₃, 3-OH-4-Cl, 3-OH-4-F, 3-Cl-4-OH, 3-F-4-OH, lower alkyl, lower alkoxy, lower alkenyl, lower alkynyl, CO(lower alkyl), or CO(lower alkoxy);

$m = 0$ or 1 ; and

$n = 0, 1, 2, 3, 4$ or 5 ;

wherein the compound has an affinity (K_i) for the SERT of less than about 500 nM.

20. A method of treating a mammal suffering from a serotonin related disorder comprising administering to the mammal an effective amount of a compound having the structural formula:



wherein:

$R_1 = \text{COOCH}_3, \text{COR}_3, \text{lower alkyl, lower alkenyl, lower alkynyl, CONHR}_4, \text{ or } \text{COR}_6$;

$R_2 =$ is a $6\alpha, 6\beta, 7\alpha$ or 7β substituent, which can be selected from H, OH, OR₃, F, Cl, Br, and NHR₃;

X = CH₂, CHY, CYY₁, CO, O, S; SO, SO₂, or C=CX₁Y with the C, O or S atom being a member of the ring;

X₁ = NR₃, CH₂, CHY, CYY₁, CO, O, S; SO, SO₂, or NSO₂R₃;

R₃ = H, (CH₂)_nC₆H₄Y, C₆H₄Y, CHCH₂, lower alkyl, lower alkenyl or lower alkynyl;

Y and Y₁ = H, Br, Cl, I, F, OH, OCH₃, CF₃, NO₂, NH₂, CN, NHCOCH₃, N(CH₃)₂, (CH₂)_nCH₃, COCH₃, or C(CH₃)₃;

R₄ = CH₃, CH₂CH₃, or CH₃SO₂;

R₆ = morpholinyl or piperidinyl;

Ar = phenyl-R₅, naphthyl-R₅, anthracenyl-R₅, phenanthrenyl-R₅, or diphenylmethoxy-R₅;

R₅ = Br, Cl, I, F, OH, OCH₃, CF₃, NO₂, NH₂, CN, NHCOCH₃, N(CH₃)₂, (CH₂)_nCH₃, COCH₃, C(CH₃)₃ where n= 0-6, 4-F, 4-Cl, 4-I, 2-F, 2-Cl, 2-I, 3-F, 3-Cl, 3-I, 3,4-diCl, 3,4-diOH, 3,4-diOAc, 3,4-diOCH₃, 3-OH-4-Cl, 3-OH-4-F, 3-Cl-4-OH, 3-F-4-OH, lower alkyl, lower alkoxy, lower alkenyl, lower alkynyl, CO(lower alkyl), or CO(lower alkoxy);

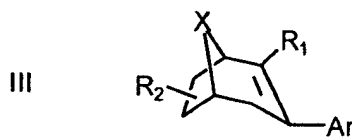
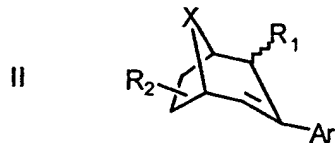
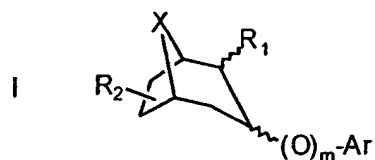
m = 0 or 1; and

n = 0, 1, 2, 3, 4 or 5;

wherein the compound has a SERT/DAT selectivity ratio of at least 3.

21. The method for treating according to claim 20, wherein the disorder is selected from depression, anxiety, eating disorders, and obsessive compulsive disorders.

22. A method of treating a mammal suffering from a serotonin related disorder comprising administering to the mammal an effective amount of a compound having the structural formula:



wherein:

$R_1 = \text{COOCH}_3, \text{COR}_3, \text{lower alkyl, lower alkenyl, lower alkynyl, CONHR}_4, \text{ or } \text{COR}_6;$

$R_2 = \text{is a } 6\alpha, 6\beta, 7\alpha \text{ or } 7\beta \text{ substituent, which can be selected from H, OH, OR}_3, \text{ F, Cl, Br, and NHR}_3;$

$X = \text{CH}_2, \text{CHY, CYY}_1, \text{CO, O, S; SO, SO}_2, \text{ or } \text{C}=\text{CX}_1\text{Y with the C, O or S atom being a member of the ring;}$

$X_1 = \text{NR}_3, \text{CH}_2, \text{CHY, CYY}_1, \text{CO, O, S; SO, SO}_2, \text{ or } \text{NSO}_2\text{R}_3;$

$R_3 = \text{H, (CH}_2)_n\text{C}_6\text{H}_4\text{Y, C}_6\text{H}_4\text{Y, CHCH}_2, \text{lower alkyl, lower alkenyl or lower alkynyl;}$

$\text{Y and Y}_1 = \text{H, Br, Cl, I, F, OH, OCH}_3, \text{CF}_3, \text{NO}_2, \text{NH}_2, \text{CN, NHCOCH}_3, \text{N(CH}_3)_2, \text{(CH}_2)_n\text{CH}_3, \text{COCH}_3, \text{ or } \text{C(CH}_3)_3;$

$R_4 = \text{CH}_3, \text{CH}_2\text{CH}_3, \text{ or } \text{CH}_3\text{SO}_2;$

$R_6 = \text{morpholinyl or piperidinyl;}$

$\text{Ar} = \text{phenyl-R}_5, \text{naphthyl-R}_5, \text{anthracenyl-R}_5, \text{phenanthrenyl-R}_5, \text{ or } \text{diphenylmethoxy-R}_5;$

$R_5 = \text{Br, Cl, I, F, OH, OCH}_3, \text{CF}_3, \text{NO}_2, \text{NH}_2, \text{CN, NHCOCH}_3, \text{N(CH}_3)_2, \text{(CH}_2)_n\text{CH}_3, \text{COCH}_3, \text{C(CH}_3)_3 \text{ where } n = 0-6, 4\text{-F, } 4\text{-Cl, } 4\text{-I, } 2\text{-F, } 2\text{-Cl, } 2\text{-I, } 3\text{-F, } 3\text{-Cl,}$

3-I, 3,4-diCl, 3,4-diOH, 3,4-diOAc, 3,4-diOCH₃, 3-OH-4-Cl, 3-OH-4-F, 3-Cl-4-OH, 3-F-4-OH, lower alkyl, lower alkoxy, lower alkenyl, lower alkynyl, CO(lower alkyl), or CO(lower alkoxy);

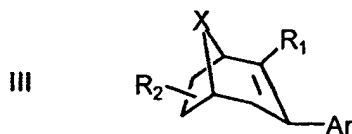
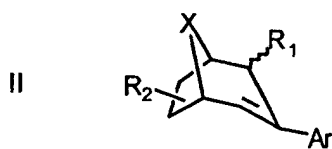
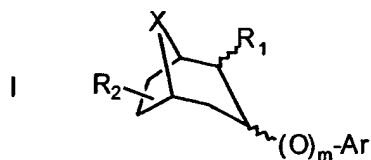
m = 0 or 1; and

n = 0, 1, 2, 3, 4 or 5;

wherein the compound has an affinity (K_i) for the SERT of less than about 500 nM.

23. The method for treating according to claim 22, wherein the disorder is selected from depression, anxiety, eating disorders, and obsessive compulsive disorders.

24. A method for treating a mammal suffering from depression comprising administering to the mammal an effective amount of a compound having the structural formula:



wherein:

$R_1 = \text{COOCH}_3, \text{COR}_3, \text{lower alkyl, lower alkenyl, lower alkynyl, CONHR}_4, \text{ or } \text{COR}_6;$

$R_2 = \text{is a } 6\alpha, 6\beta, 7\alpha \text{ or } 7\beta \text{ substituent, which can be selected from H, OH, OR}_3, \text{ F, Cl, Br, and NHR}_3;$

$X = \text{CH}_2, \text{CHY, CYY}_1, \text{CO, O, S; SO, SO}_2, \text{ or } \text{C=CX}_1\text{Y with the C, O or S atom being a member of the ring;}$

$X_1 = \text{NR}_3, \text{CH}_2, \text{CHY, CYY}_1, \text{CO, O, S; SO, SO}_2, \text{ or } \text{NSO}_2\text{R}_3;$

$R_3 = \text{H, (CH}_2)_n\text{C}_6\text{H}_4\text{Y, C}_6\text{H}_4\text{Y, CHCH}_2, \text{lower alkyl, lower alkenyl or lower alkynyl;}$

$\text{Y and Y}_1 = \text{H, Br, Cl, I, F, OH, OCH}_3, \text{CF}_3, \text{NO}_2, \text{NH}_2, \text{CN, NHCOCH}_3, \text{N(CH}_3)_2, \text{(CH}_2)_n\text{CH}_3, \text{COCH}_3, \text{ or } \text{C(CH}_3)_3;$

$R_4 = \text{CH}_3, \text{CH}_2\text{CH}_3, \text{ or } \text{CH}_3\text{SO}_2;$

$R_6 = \text{morpholinyl or piperidinyl;}$

$\text{Ar} = \text{phenyl-R}_5, \text{naphthyl-R}_5, \text{anthracenyl-R}_5, \text{phenanthrenyl-R}_5, \text{ or diphenylmethoxy-R}_5;$

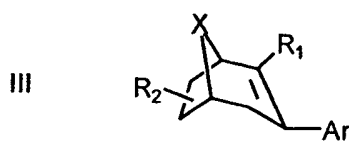
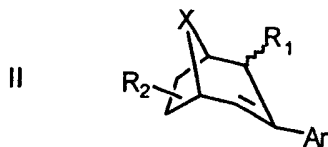
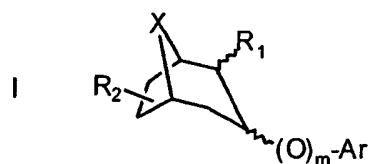
$R_5 = \text{Br, Cl, I, F, OH, OCH}_3, \text{CF}_3, \text{NO}_2, \text{NH}_2, \text{CN, NHCOCH}_3, \text{N(CH}_3)_2, \text{(CH}_2)_n\text{CH}_3, \text{COCH}_3, \text{C(CH}_3)_3 \text{ where } n = 0-6, 4\text{-F, 4-Cl, 4-I, 2-F, 2-Cl, 2-I, 3-F, 3-Cl, 3-I, 3,4-diCl, 3,4-diOH, 3,4-diOAc, 3,4-diOCH}_3, \text{3-OH-4-Cl, 3-OH-4-F, 3-Cl-4-OH, 3-F-4-OH, lower alkyl, lower alkoxy, lower alkenyl, lower alkynyl, CO(lower alkyl), or CO(lower alkoxy);}$

$m = 0 \text{ or } 1; \text{ and}$

$n = 0, 1, 2, 3, 4 \text{ or } 5;$

wherein the compound has a SERT/DAT selectivity ratio of at least 3.

25. A method for treating a mammal suffering from depression comprising administering to the mammal an effective amount of a compound having the structural formula:



wherein:

R_1 = COOCH_3 , COR_3 , lower alkyl, lower alkenyl, lower alkynyl, CONHR_4 , or COR_6 ;

R_2 = is a 6α , 6β , 7α or 7β substituent, which can be selected from H, OH, OR_3 , F, Cl, Br, and NHR_3 ;

X = CH_2 , CHY , CYY_1 , CO, O, S; SO, SO_2 , or $\text{C}=\text{CX}_1\text{Y}$ with the C, O or S atom being a member of the ring;

X_1 = NR_3 , CH_2 , CHY , CYY_1 , CO, O, S; SO, SO_2 , or NSO_2R_3 ;

R_3 = H, $(\text{CH}_2)_n\text{C}_6\text{H}_4\text{Y}$, $\text{C}_6\text{H}_4\text{Y}$, CHCH_2 , lower alkyl, lower alkenyl or lower alkynyl;

Y and Y_1 = H, Br, Cl, I, F, OH, OCH_3 , CF_3 , NO_2 , NH_2 , CN, NHCOCH_3 , $\text{N}(\text{CH}_3)_2$, $(\text{CH}_2)_n\text{CH}_3$, COCH_3 , or $\text{C}(\text{CH}_3)_3$;

R_4 = CH_3 , CH_2CH_3 , or CH_3SO_2 ;

R_6 = morpholinyl or piperidinyl;

Ar = phenyl- R_5 , naphthyl- R_5 , anthracenyl- R_5 , phenanthrenyl- R_5 , or diphenylmethoxy- R_5 ;

R_5 = Br, Cl, I, F, OH, OCH_3 , CF_3 , NO_2 , NH_2 , CN, NHCOCH_3 , $\text{N}(\text{CH}_3)_2$, $(\text{CH}_2)_n\text{CH}_3$, COCH_3 , $\text{C}(\text{CH}_3)_3$ where $n = 0-6$, 4-F, 4-Cl, 4-I, 2-F, 2-Cl, 2-I, 3-F, 3-Cl,

3-I, 3,4-diCl, 3,4-diOH, 3,4-diOAc, 3,4-diOCH₃, 3-OH-4-Cl, 3-OH-4-F, 3-Cl-4-OH, 3-F-4-OH, lower alkyl, lower alkoxy, lower alkenyl, lower alkynyl, CO(lower alkyl), or CO(lower alkoxy);

m = 0 or 1; and

n = 0, 1, 2, 3, 4 or 5;

wherein the compound has an affinity (K_i) for the SERT of less than about 500 nM.